CLAIMS:

1. An apparatus comprising:

a class E amplifier having a first transistor;

a second transistor controlling a current path in parallel to the first transistor; and

a controller to control the first and second transistors.

2. The apparatus of claim 1, wherein the first and second transistors comprise metal oxide semiconductor field-effect transistors (MOSFET's), and further wherein the second transistor has a source connected to ground and a drain connected to a drain of the first transistor by a resistor.

3. The apparatus of claim 1, wherein the apparatus produces an amplitude modulated signal in response to the controller by:

for a first period of time, simultaneously switching the first transistor at a frequency and deactivating the second transistor; and

for a second period of time, simultaneously deactivating the first transistor and activating the second transistor.

4. The apparatus of claim 3, wherein the frequency is at least 13.56 megahertz.

5. The apparatus of claim 1, wherein the class E amplifier includes an inductor supplying current to the first transistor, and a shunt capacitor connected in parallel to the first transistor.

6. An amplifier comprising:

a first transistor;

an inductor coupling the first transistor to a supply voltage via a first resistor;

a shunt capacitor connected in parallel to the first transistor;

a second transistor connected to the inductor by a second resistor, wherein the second transistor controls a current path in parallel to the first transistor and the capacitor;

a third transistor connected in parallel to the first resistor; and

a controller coupled to the first, second and third transistors.

7. The amplifier of claim 6, wherein the controller selectively activates the first and second transistors.

8. The amplifier of claim 6, wherein the controller activates and deactivates the first transistor at a frequency, and activates and deactivates the second transistor.

9. The amplifier of claim 8, wherein the frequency is at least 13.56 megahertz.

10. The amplifier of claim 6, wherein the controller activates and deactivates the first transistor at a frequency, and activates and deactivates the third transistor.

11. The amplifier of claim 10, wherein the frequency is at least 13.56 megahertz.

12. An apparatus comprising:

a class E amplifier having a first transistor and an inductor coupling the first transistor to a supply voltage via a first resistor;

a second transistor connected in parallel to the first resistor; and

a controller coupled to the first and second transistors.

13. The apparatus of claim 12, wherein the controller activates and deactivates the first transistor at a frequency, and activates and deactivates the second transistor.

14. The apparatus of claim 13, wherein the frequency is at least 13.56 megahertz.

15. The apparatus of claim 12, wherein the amplifier further comprises:

a shunt capacitor connected in parallel to the first transistor; and

a third transistor controlling a current path in parallel to the first transistor and the capacitor.

16. The apparatus of claim 15, wherein the controller selectively activates the first and third transistors.